STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the Matter of:

Denova Environmental, Inc. 2610 North Alder Avenue Rialto, California 92377 EPA ID. No. CAT080022148

InterCoastal LLC 2304 West 16th Street Long Beach, California 90813

Robert V. Cole 75 Teloma Drive Ventura, California 93003

Carol A. Cole 75 Teloma Drive Ventura, California 93003

Robert V. Cole Family Trust dated December 9, 1976 75 Teloma Drive Ventura, California 93003

Robert V. Cole Family Trust dated May 14, 1991 75 Teloma Drive Ventura, California 93003

Gene S. Van Houten 16775 Morning View Drive Riverside, California 92504

Eileen M. Van Houten 16775 Morning View Drive Riverside, California 92504

Respondents.

Docket HWCA :_P4-02/03-004

ENFORCEMENT ORDER FOR
CLOSURE AND CORRECTIVE
ACTION WITH IMMINENT AND
SUBSTANTIAL ENDANGERMENT
DETERMINATION

Health and Safety Code Section 25187

INTRODUCTION

- 1.1. <u>Summary</u>. The State of California Department of Toxic Substances Control (DTSC) issues this Imminent and Substantial Endangerment Enforcement Order for Closure and Corrective Action (Order) to Denova Environmental, Inc. (Denova), Intercoastal LLC (Intercoastal), Robert V. Cole, Carol A. Cole, Robert V. Cole Family Trust dated December 9, 1976, Robert V. Cole Family Trust dated May 14, 1991, Gene S. Van Houten and Eileen M. Van Houten (all eight hereinafter referred to as Respondents).
 - 1.2. Parties.
- 1.2.1 DTSC is the state agency with the responsibility and jurisdiction to enforce the Hazardous Waste Control Law ("HWCL"), Health and Safety Code section 25100 et seq. and the implementing regulations in California Code of Regulations title 22, sections 66260 et seq.
- 1.2.2. Respondent Denova is a California corporation. Respondent Denova is a "person" as defined in Health and Safety Code section 25118. Respondent Denova is an "owner" and /or "operator" of a hazardous waste facility (Facility), as those terms are defined in California Code of Regulations title 22, section 66260.10. The Facility is located upon three parcels of

land (parcel Nos. 239-161-32, 239-161-07 and 239-161-08 of the County of San Bernardino Assessor's Map, Book 239, page 16) in the City of Rialto, California. These three parcels are referred to as the Denova TSDF Location in Figure 1. The Facility also includes the Office property at 2824 North Locust Avenue (designated Office Location in Figure 1) in Rialto, California as described in section 1.3.1 of this Order. Corrective Action for the Office Location is not a part of this Order, but will be addressed in a separate Corrective Action Order to be issued by DTSC. The Facility engaged in the management of hazardous waste under Interim Status authorization issued on September 18, 1981 by the Department of Health Services, which was the DTSC's predecessor agency. The Facility's authorization to operate as a hazardous waste facility was terminated by DTSC on May 28, 2002.

- 1.2.3. Respondent Intercoastal is a California limited liability corporation. Respondent Intercoastal is a "person" as defined in Health and Safety Code section 25118. Respondent Intercoastal is an "owner" and/or "operator" of a hazardous waste facility, as those terms are defined in California Code of Regulations title 22, section 66260.10. Respondent Intercoastal acquired an interest in the Denova TSDF Location in April 2002.
- 1.2.4. Respondent Robert V. Cole (Cole) is an individual and the acting President of the Facility.

Respondent Cole is a "person" as defined in Health and Safety Code section 25118. Respondent Cole is an "owner" and/or "operator" of a hazardous waste facility, as those terms are defined in California Code of Regulations title 22, section 66260.10. Respondent Cole has been an officer and director of the Facility. Respondent Cole has exercised control over the management decisions of the Facility, including but not limited to decisions regarding hazardous waste operations and management at the Facility. Respondent Cole is a trustor, co-trustee and beneficiary of the Robert V. Cole Family Trust dated December 9, 1976, which acquired an undivided one half interest in the real property of the Denova TSDF Location in February 2000. In August 2000, Respondent Cole and co-trustee Carol A. Cole transferred that undivided one half interest to the Robert V. Cole Family Trust dated May 14, 1991. Respondent Cole is also a trustor, co-trustee and beneficiary of the Robert V. Cole Family Trust dated May 14, 1991.

1.2.5. Respondent Carol A. Cole is a "person" as defined in Health and Safety Code section 25118. Respondent Carol A. Cole is an "owner" and/or "operator" of a hazardous waste facility, as those terms are defined in California Code of Regulations title 22, section 66260.10. Respondent Carol A. Cole is a trustor, co-trustee and beneficiary of the Robert V. Cole Family Trust dated December 9, 1976. Respondent

Carol A. Cole is a trustor, co-trustee and beneficiary of the Robert V. Cole Family Trust dated May 14, 1991. Both the Robert V. Cole Family Trust dated December 9, 1976 and the Robert V. Cole Family Trust dated May 14, 1991 had an undivided one half interest in the real property of the Denova TSDF Location as described in paragraph 1.2.4 above.

1.2.6. Respondent Robert V. Cole Family Trust dated

December 9, 1976 is a "person" as defined in Health and Safety

Code section 25118. Respondent Robert V. Cole Family Trust

dated May 14, 1991 is a "person" as defined in Health and Safety

Code section 25118. The Robert V. Cole Family Trust dated

December 9, 1976 and the Robert V. Cole Family Trust dated

May 14, 1991 were "owners" and/or "operators" of a hazardous

waste facility, as those terms are defined in California Code of

Regulations title 22, section 66260.10. Respondent

Robert V. Cole Family Trust dated December 9, 1976 and

Respondent Robert V. Cole Family Trust dated May 14, 1991 had

an undivided one half interest in the real property of the

Denova TSDF Location as described in paragraph 1.2.4 above.

1.2.7. Respondent Gene S. Van Houten is a person as defined in Health and Safety Code section 25118. Respondent Van Houten is a prior "owner" and/or "operator" of a hazardous waste facility, as those terms are defined in California Code of Regulations title 22, section 66260.10. Respondent Van Houten has been an officer and shareholder of the Facility, and has

exercised control over the management decisions of the Facility including but not limited to decisions regarding hazardous waste management at the Facility. Respondent Van Houten and Eileen M. Van Houten, husband and wife as joint tenants, acquired an undivided one half interest in the real property of the Denova TSDF Location in February 2000.

- 1.2.8. Respondent Eileen M. Van Houten is a person as defined in Health and Safety Code section 25118. Respondent Eileen M. Van Houten and Respondent Van Houten, husband and wife as joint tenants, acquired an undivided one half interest in the real property of the Denova TSDF Location in February 2000.
- 1.2.9 Other Owners/Operators. In addition to Respondents named above, DTSC has identified other owners and operators of the Facility. DTSC reserves the right to amend this Order to include any of these other parties at a later date. These other owners and operators include but may not be limited to Broco, Inc. (Broco), and Broco Environmental, Inc. (BEI). Prior owners of the real property on which the Facility is situated include but may not be limited to Jerome S. Brower and Peggy L. Brower, and the Jerome S. Brower and Peggy L. Brower, and the Jerome S. Brower and Peggy L. Brower Trust dated January 25, 1985. In addition, Rialto Asset and Property Holdings Inc. and Respondent Intercoastal are currently in a litigation over ownership of the Denova TSDF Location.

- 1.3 Description, Permitting Status and History.
- Description. Figure 1 shows three separate 1.3.1. locations for the hazardous waste treatment, storage or disposal operations conducted by Broco, BEI and Respondent Denova: the Pre-1988 Broco TSDF Location, the Denova TSDF Location and the Office Location at 2824 North Locust Avenue in Rialto, California. The Pre-1988 Broco TSDF Location is a former hazardous waste TSDF location operated by Broco prior to 1988 and is not a part of this Order. Both the Denova TSDF Location and the Pre-1988 Broco TSDF Location have been identified in Part A Permit Applications submitted by Broco, BEI and Respondent Denova as having the street address "2610 North Alder Avenue", although this street address originally designated the Pre-1988 Broco TSDF Location. The Office Location at 2824 North Locust Avenue was the location of the offices of Broco, BEI and Respondent Denova. Additionally, according to the RCRA Facility Assessment completed by the United States Environmental Protection Agency (U.S. EPA) on March 28, 1990, Broco manufactured explosive devices, stored explosives and allowed two companies to store hazardous materials at the 2824 North Locust address. Both BEI and Respondent Denova maintained a laboratory at the 2824 North Locust address that was used to analyze incoming hazardous waste. Corrective Action for the Office Location at 2824 North Locust Avenue will be required in a separate Order for Corrective Action issued by DTSC.

North Locust Avenue, Rialto, California. Hazardous materials were stored at several locations at this address according to the U.S. EPA RFA. The RFA identified three AOCs (Oil Spill Area, Western Alta Storage Area and H.K. Research Storage Area) and one SWMU (Hazardous Waste Storage Area) at the Office Location. In addition, DTSC has identified three more SWMUs (manufacturing shed, explosive magazine and a hazardous waste analytical laboratory) at the Office Location. Corrective Action for the Office Location will be required in a separate Order for Corrective Action issued by DTSC.

1.3.2 Permitting Status and History

1.3.2.1. In 1980, Broco submitted a Part A Permit
Application for a Hazardous Waste Facility Permit (Permit) to
U.S. EPA and the Department of Health Services (DHS), DTSC's
predecessor agency. On September 18, 1981, DHS issued an
Interim Status Document to Broco authorizing Broco to manage
hazardous waste and delineating conditions of Broco's Interim
Status authorization. Broco was authorized to accept a variety
of hazardous wastes, including waste explosives, reactives,
flammables, oxidizers, and corrosives, and was authorized to
store, transfer, and/or consolidate these hazardous wastes.
Broco was also authorized to operate an Open Burn/Open
Detonation (OB/OD) Unit for the disposal of explosive hazardous
wastes. Two OB/OD Units were designated in the Part A Permit

Application, one located at the Pre-1988 Broco TSDF Location and the other at the Denova TSDF Location. The OB/OD Unit addressed in this Order is the Unit at the Denova TSDF Location.

- 1.3.2.2. In 1987, Broco Inc. moved its operation from the original location at 2610 North Alder (Pre-1988 Broco TSDF Location) to a location approximately ½ mile to the north (Denova TSDF Location), when an explosion in a neighboring ammunition bunker destroyed a number of the structures at the Pre-1988 Broco TSDF Location. See Figure 1 for details. Broco continued to use the original 2610 N. Alder Avenue address although the new location is not contiguous with the original location.
- approved the transfer of Interim Status authorization from Broco to BEI in 1994. In 1995, BEI submitted a Closure Plan to DTSC to close the Open Burn/Open Detonation (OB/OD) Unit at the Denova TSDF Location. Operations at the OB/OD unit ceased in 1994. U.S. EPA used the OB/OD unit during Emergency Response Actions at the Denova TSDF Location in March and June of 2001 and again in 2002 to 2003, as discussed in paragraph 1.3.2.9.
- 1.3.2.4. In April 1999, Respondent Denova purchased BEI and submitted to DTSC a revised Part A Permit Application and a request for transfer of Interim Status Authorization from BEI to Respondent Denova.

- 1.3.2.5. On May 15, 2000, DTSC issued a Notice of Decision Approving with Changes the Transfer of Interim Status Authorization (Transfer Approval) from BEI to Respondent Denova. The Transfer Approval restricted Respondent Denova's receipt, handling, and storage of certain hazardous wastes, including reactive wastes.
- 1.3.2.6. On June 23, 2000, DTSC approved with modifications the Closure Plan for the Open Burn/Open Detonation (OB/OD) Unit at the Denova TSDF Location.
- 1.3.2.7. On September 7, 2001, DTSC issued a
 Revocation Order and Amended Enforcement Order with Imminent and
 Substantial Endangerment Determination (September 2001 Order) to
 Respondents Denova, Gene Van Houten and Robert V. Cole. The
 Order included revocation of Respondent Denova's Interim Status
 Authorization based on repeated and serious violations of HWCL.
 The September 2001 Order also required Respondents Denova,
 Gene Van Houten and Robert V. Cole to complete closure of the
 OB/OD Unit within 60 days of the effective date of the
 September 2001 Order and to submit the Closure Certification
 Report. To date, Respondents Denova, Gene Van Houten and Robert
 V. Cole have not completed closure of the OB/OD Unit or
 submitted the Closure Certification Report.
- 1.3.2.8. On March 29, 2002, Respondents Denova and Robert V. Cole signed a Partial Stipulation and Order

(March 2002 Stipulation) with DTSC that required Respondents

Denova and Robert V. Cole to comply with stringent requirements,

including significantly curtailed facility operations, removal

of the hazardous waste inventory, submission of a revised Part A

Permit Application, and submission of a Closure Plan for closure

of operations at the Denova TSDF Location to DTSC (except for

limited operations) by May 28, 2002. To date, Respondents

Denova and Robert V. Cole have not submitted the Closure Plan.

- 1.3.2.9. On May 28, 2002, DTSC terminated Respondent Denova's Interim Status Authorization based on Respondent Denova's failure to submit a complete revised Part A Permit Application and failure to remove the hazardous waste inventory from the site as required by the March 2002 Stipulation. From May 2002 to April 2003, U.S. EPA conducted an Emergency Response Action under CERCLA to remove the hazardous waste inventory, including hazardous waste explosives, from the Denova TSDF Location. U.S. EPA also utilized the existing OB/OD unit for detonation of explosives on site. DTSC requested assistance from U.S. EPA because DTSC did not have the expertise in explosives materials handling to oversee the removal of the waste explosives from the site.
- 1.4. <u>Jurisdiction</u>. Section 25187 of the Health and Safety Code authorizes DTSC to order corrective action when the DTSC determines that there is or has been a release of hazardous

waste or hazardous waste constituents into the environment from a hazardous waste facility.

- 1.5. <u>Definition of Terms</u>. The terms used in this Order are as defined in the California Code of Regulations, title 22, section 66260.10, except as otherwise provided.
- 1.6. <u>Attachments</u>. All attachments to this Order are incorporated herein by this reference.

FINDINGS OF FACT

Hazardous Waste Management Units at the Denova TSDF Location Requiring Closure. In August 2000, Respondent Denova submitted a Part B Hazardous Waste Permit Application to DTSC which identified a number of Hazardous Waste Management Units (HWMUs) at the Denova TSDF Location. Ten intermodal trailers were used to store a wide variety of hazardous wastes in containers (depicted as "Waste Storage Trailers" on Figure 2), and four explosive bunkers (also known as "igloos" and depicted as Explosives Bunkers 1 through 4 on Figure 2) were used to store explosive waste. In addition, three concrete pads: the RCRA pad, the non-RCRA pad and the QA Area, and a concrete runway were authorized as staging areas for storage of hazardous waste less than 48 hours. These HWMUs are depicted in Figure 2. Except for the RCRA pad, these structures were removed as part of the Emergency Response Action conducted by U.S. EPA from May 2002 to April 2003. Confirmation soil

sampling for constituents of concern conducted by U.S. EPA in October 2002 revealed contamination of surface soils at several locations with perchlorate and explosive chemicals octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX), hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX).

- 2.1.1 Open Burn/Open Detonation Unit at the Denova

 TSDF Location. DTSC approved the Closure Plan for the Open

 Burn/Open Detonation (OB/OD) Unit at the Denova TSDF Location on

 June 23, 2000. Respondent Denova has not completed closure of

 the OB/OD Unit nor submitted the Closure Certification Report.
- 2.2. Solid Waste Management Units at the Denova TSDF Location Requiring Corrective Action. On March 28, 1990, U.S. EPA completed a RCRA Facility Assessment (RFA) which identified several Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). The U.S. EPA inspected three locations: the Office Location at 2824 North Locust, the Pre-1988 Broco TSDF location and the Denova TSDF location, all three shown on Figure 1. The RFA identified the Explosive Bunker Storage Area (depicted as "Explosive Products and Evidence Storage" on Figure 2), at the Denova TSDF Location as an Area of Concern. However, sampling data collected by U.S. EPA in Fall 2002 as part of the Emergency Response Action revealed perchlorate, RDX and HMX contamination in one surface soil sample in the Explosive Bunker Storage Area. Therefore, DTSC is reclassifying this unit as a SWMU. Based on DTSC inspection reports dated

February 22, 1996, March 11 1996; August 8, 1996; June 19, 2001; May 14, 2001; May 29, 2001; June 8, 2001; and August 14, 2001, DTSC has identified two additional SWMUs and an additional AOC at the Denova TSDF Location. These SWMUs are two explosive storage igloos (depicted as Explosive Bunkers 5 and 6 on Figure 2) used to store explosives product. These two igloos were removed as part of the U.S. EPA Emergency Response Action mentioned earlier. DTSC has determined that the entire soil area at the Denova TSDF Location is an AOC because hazardous wastes were stored at numerous unauthorized areas as documented in the above referenced inspection reports and sampling data collected by U.S. EPA in Fall 2002 as part of the Emergency Response Action revealed surface soil contamination at a number of locations at the Denova TSDF Location.

2.3. Based on the documents referenced above, DTSC concludes that further investigation is needed to determine the nature and extent of contamination in the HWMUs, SWMUs and AOCs at the Denova TSDF Location as listed below and in Figures 1 and 2:

HWMUs #1 through #10: Ten intermodal storage trailers used to store hazardous wastes including caustics, toxics, oxidizers, reactives, and flammables. These HWMUs were removed during the U.S. EPA Emergency Response Action in 2002-2003.

HWMUs #11 through #14: Three concrete pads (RCRA pad, non-RCRA pad, QA pad) and a concrete runway used as staging areas for hazardous wastes. Except for the RCRA pad, these HWMUs were removed during the U.S. EPA Emergency Response Action in 2002-2003.

HWMUs #15 through #18: Four concrete explosive igloos

(Explosive Bunkers 1 through 4) used to store explosive
hazardous wastes. These HWMUs were removed during the U.S.

EPA Emergency Response Action in 2002-2003.

HWMU #19: Open Burn/Open Detonation Unit.

SWMU #1 and #2: Two concrete explosive igloos (Explosive Bunkers 5 and 6) used to store explosive hazardous products. These SWMUs were removed during the U.S. EPA Emergency Response Action in 2002-2003.

SWMU #3: Explosive Bunker Storage Area (depicted as "Explosive Products and Evidence Storage" on Figure 2).

AOC #1: Entire soil area at the Denova TSDF Location.

2.4. Hazardous wastes or hazardous waste constituents may have migrated from the Denova TSDF Location into the

environment through the following pathways: from HWMUs or SWMUs or AOCs into the soil and from soil into groundwater or surface water runoff.

- 2.5. <u>Constituents of Concern</u>. Due to the wide variety of hazardous waste stored at the Denova TSDF Location, the hazardous waste constituents of concern include the following: CAM Metals, volatile organic compounds, semivolatile organic compounds, pesticides, PCBs, explosive chemicals including propellants, perchlorate, HMX, RDX and n-nitrosodimethylamine.
- 2.6. <u>Surrounding Area</u>. The Denova TSDF Location is located in an industrial area in the City of Rialto, California. The general area in which the Denova TSDF Location is located is also a Formerly Used Defense Site (FUDS), the Rialto Ammunition Storage Point. Surrounding businesses include Rialto Concrete Products, a cement processor, Pyro Spectacular and Astro Pyrotechnics, fireworks manufacturers. The San Bernardino Mid-Valley Sanitary Landfill is located approximately ½ mile south of the Denova TSDF Location. The County of San Bernardino has purchased the land immediately south of the Denova TSDF Location and plans to use the land for future expansion of the Mid-Valley Sanitary Landfill. A residential community, the Las Colinas housing development, is located approximately ½ mile north of the Denova TSDF Location. The nearest school is

located approximately one mile to the northeast of the Denova TSDF Location.

- 2.6.1. Groundwater Basin. The Denova TSDF Location is located within the northwest portion of the Rialto-Colton Basin. At this location, groundwater occurs in three laterally-continuous aquifers: an upper unconfined aquifer that occurs at depths of about 245 to 340 feet below ground surface (the A-zone), and intermediate confined aquifer that is encountered between approximately 315 and 375 feet below ground surface (the B-zone), and a deep confined regional aquifer that is first encountered at depths greater than about 420 feet (the C-zone). The three aquifers are separated by low-permeability, laterally continuous aquitards that generally range in thickness from about 5 to 30 feet. Drinking water supply wells are located in the C-zone. The nearest drinking well is located approximately 1.5 miles southeast of the Denova TSDF Location.
- 2.7. <u>Potential Receptors</u>. Releases from the Denova TSDF Location may impact the following receptors: Humans or animals walking on the soils of the Denova TSDF Location may be exposed to contaminants in the soil. Dust originating from contaminated soils at the Denova TSDF Location may be blown off site by wind and transported to nearby residences and businesses. Contaminants from the soil may migrate to surface water and groundwater and may impact the local drinking water supply.

- 2.8. <u>Imminent and Substantial Endangerment</u>
 Determination
- 2.8.1. Perchlorate Impacts The Rialto/Colton Groundwater Basin has been impacted by perchlorate, a contaminant found in rocket and missile fuel, explosives, fireworks, and numerous other industrial goods. From 1997 to August 2002, 20 drinking water supply wells in the Rialto/Colton Basin have been taken out of service due to perchlorate contamination, resulting in a water supply loss of approximately 40,000 gallons/minute. These 20 wells would provide drinking water to approximately 250,000 people. This represents a significant loss of water supply to the Rialto/Colton/San Bernardino/Fontana region, and could result in a water emergency with water rationing or having to supply customers with bottled water if replacement water supplies are not available. are currently no state or federal drinking water standards for perchlorate. However, in 1997, the California Department of Health Services (DHS) established a drinking water Action Level (AL) for perchlorate of 18 parts per billion (ppb), and in 2002, DHS lowered the AL to 4 ppb. An AL is a temporary safe drinking water level that is based on limited studies that have been performed.
- 2.8.1.1 <u>Regional Board Orders.</u> In response to the shutdown of the 20 drinking water supply wells, the Santa Ana Regional Water Quality Control Board has identified over nine

business entities in the immediate area around the Denova TSDF Location as being possible sources of perchlorate contamination to groundwater, and has issued orders to require the parties to investigate their properties for perchlorate.

2.8.1.2 Denova and Perchlorate. DTSC considers the Denova TSDF Location as a possible source of perchlorate for several reasons. Respondent Denova stored perchloratecontaining wastes as part of its explosives hazardous waste inventory as documented during several inspections conducted by DTSC in 2001 (Inspection Reports dated May 14, 2001, November 9, 2001 and November 21, 2001). In a revised Part A Permit Application dated October 23, 1992 and submitted to DTSC on November 25, 1992, BEI listed several perchlorate compounds as typical explosive wastes that were treated in the OB/OD Unit. Wastes in the OB/OD unit were placed either directly on the ground or in a burn cage and then either ignited or detonated. The residue was then collected and disposed of off site in a landfill. Since the waste was treated directly on the land and not in an enclosed container, there is a high probability that the soil has been contaminated from treatment of the waste. Finally, soil sampling conducted by U.S. EPA in 2002 as part of the Emergency Response Action revealed that perchlorate was detected at five locations in shallow soil (0-6 inches below ground surface) at the Denova TSDF Location with concentrations

ranging from 25 to 210 ug/kg. Deeper soil sampling has not been conducted.

- 2.8.2. Health Effects of Perchlorate. Perchlorate disrupts production of thyroid hormone in both humans and laboratory animals. Thyroid hormones help regulate the body's metabolism and physical growth. Pregnant women and fetuses are the most sensitive receptors for adverse effects of perchlorate on the thyroid due to the increase demands of growth and metabolism during pregnancy. DHS established an AL of 4 ug/L for perchlorate in groundwater in 2002. All 20 of the affected drinking water wells in the Rialto/Colton Groundwater Basin have perchlorate above the action level, with detectable concentrations ranging from less than 6 ug/L to 820 ug/L.
- 2.8.3. Mobility and Routes of Exposure for

 Perchlorate in the Environment. Perchlorate is a salt and is
 highly mobile in soil and groundwater due to its high solubility
 in water and minimal tendency to sorb to soil particles. Thus,
 perchlorate contamination readily leaches to groundwater and
 once in groundwater migrates readily. Perchlorate is generally
 persistent in the subsurface environment.
- 2.8.4. <u>Population at Risk.</u> The population at risk includes residents and businesses in the Rialto/Colton/San Bernardino/Fontana area who depend on groundwater in the Rialto/Colton Groundwater Basin for drinking water supply. The

drinking water supply of approximately 250,000 people has been significantly affected by the closure of these 20 wells.

2.8.5. <u>Determination</u>. DTSC hereby determines that there is a significant probability that the soils at the Denova TSDF Location may be contaminated with perchlorate, that the perchlorate has migrated or will migrate to groundwater and impact drinking water in the Rialto/Colton Groundwater Basin, and that this situation may pose an imminent and substantial endangerment to public health or safety or the environment.

DTSC also determines that the provisions of this Order are so related to public health or safety or the environment that immediate compliance with the Order as a whole is necessary. These determinations are based on the above findings.

WORK TO BE PERFORMED

- 3. Based on the foregoing FINDINGS OF FACT, IT IS HEREBY ORDERED THAT:
 - 3.1 Corrective Action.
- 3.1.1 (OB/OD) Unit Perchlorate Investigation. With the approval of DTSC, Respondents may conduct a limited investigation of perchlorate in surface and subsurface soils at the OB/OD Unit prior to submitting a Current Conditions Report and RCRA Facility Investigation Workplan. The purpose of the OB/OD Unit Perchlorate Investigation would be to determine if the OB/OD Unit is a potential source of groundwater

contamination. If Respondents choose this option, a Workplan and Health and Safety Plan for the OB/OD Unit Perchlorate Investigation and a Health and Safety Plan must be submitted to DTSC no later than 45 days from the effective date of this Order. The Workplan must meet the requirements for a RCRA Facility Investigation Workplan as described in items 1 through 7 of section 3.1.2.2 of this Order and applicable sections of Attachment 1, and the Health and Safety Plan must meet the requirements for a Health and Safety Plan as described in Attachment 2. A specific schedule for implementation of all activities shall be included in the Workplan. Following completion of the OB/OD Unit Perchlorate Investigation fieldwork, a RCRA Facility Investigation Report (OB/OD Unit Perchlorate Investigation Report) documenting the results of the investigation must be submitted to DTSC. The OB/OD Unit Perchlorate Investigation Report must meet the applicable requirements for a RCRA Facility Investigation Report as described in Attachment 1. If the option to conduct the OB/OD Unit Perchlorate Investigation is chosen, the RCRA Facility Investigation Workplan, Current Conditions Report (including assessment of need for Interim Measures), Community Profile and Health and Safety Plan described in section 3.1.2.5 are due 90 days after submittal of the OB/OD Unit Perchlorate Investigation Report.

3.1.2. RCRA Facility Investigation

- 3.1.2.1. If Respondents choose not to perform the limited OB/OD Unit Perchlorate Investigation outlined in Section 3.1.1 of this order, then within 90 days of the effective date of this Order, Respondents shall submit to the DTSC a Current Conditions Report and a Workplan for a RCRA Facility Investigation ("RFI Workplan"). The Current Conditions Report and RFI Workplan are subject to approval by DTSC and shall be developed in a manner consistent with the Scope of Work for a RCRA Facility Investigation contained in Attachment 1. DTSC will review the Current Conditions Report and RFI Workplan and notify Respondents in writing of the DTSC's approval or disapproval.
- 3.1.2.2. The RFI Workplan shall detail the methodology to: (1) gather data needed to make decisions on interim measures/stabilization during the early phases of the RCRA Facility Investigation; (2) identify and characterize all sources of contamination; (3) define the nature, degree and extent of contamination; (4) define the rate of movement and direction of contamination flow; (5) characterize the potential pathways of contaminant migration; (6) identify actual or potential human and/or ecological receptors; and (7) support development of alternatives from which a corrective measure will be selected by the DTSC. The RFI Workplan shall include sampling as required by DTSC of all HWMUs, SWMUs and AOCs

described in Section 2.3 of this Order. A specific schedule for implementation of all activities shall be included in the RFI Workplan.

- 3.1.2.3. The Current Conditions Report shall be consistent with the Scope of Work for a RCRA Facility Investigation contained in Attachment 1 and shall contain an assessment of interim measures. Interim measures shall be used whenever possible to control or abate immediate threats to human health and/or the environment, and to prevent and/or minimize the spread of contaminants while long-term corrective action alternatives are being evaluated. The assessment must include both previously implemented interim measures and other interim measures that could be implemented at the Denova TSDF Location. The assessment must also identify any additional data needed for making decisions on interim measures. This new data or information shall be collected during the early stages of the RCRA Facility Investigation. DTSC will review the Respondents' assessment and determine which interim measures, if any, the Respondents will implement at the Denova TSDF Location. deemed appropriate by DTSC, such determination may be deferred until additional data are collected.
- 3.1.2.4. Respondents shall submit a RCRA Facility
 Investigation Report (RFI Report) to DTSC for approval in
 accordance with the DTSC-approved RFI Workplan schedule. The
 RFI Report shall be developed in a manner consistent with the

Scope of Work for a RCRA Facility Investigation contained in Attachment 1. If there is a phased investigation, separate RFI Reports and a report that summarizes the findings from all phases of the RCRA Facility Investigation must be submitted to DTSC. DTSC will review the RFI Report(s) and notify Respondents in writing of DTSC's approval or disapproval.

- 3.1.2.5. Concurrent with the submission of the RFI Workplan, Respondents shall submit to the DTSC a Health and Safety Plan in accordance with Attachment 2.
- 3.1.2.6. Respondents shall submit a RFI Summary Fact Sheet to DTSC that summarizes the findings from all phases of the RCRA Facility Investigation. The RFI Summary Fact Sheet shall be submitted to DTSC in accordance with the schedule contained in the approved RFI Workplan. DTSC will review the RFI Summary Fact Sheet and notify Respondents in writing of DTSC's approval or disapproval, including any comments and/or modifications. When DTSC approves the RFI Summary Fact Sheet, Respondents shall mail the approved RFI Summary Fact Sheet to all individuals on the Facility mailing list established pursuant to California Code of Regulations, title 22, section 66271.9(c)(1)(D), within 15 calendar days of receipt of written approval.
- 3.1.2.7. Concurrent with the submission of the RFI Workplan, Respondents shall submit to DTSC a Community Profile for DTSC approval in accordance with Attachment 3.

Based on the information provided in the Community Profile, if DTSC determines that there is a high level of community concern, DTSC may require Respondents to prepare a Public Participation Plan.

3.1.3. Interim Measures (IM).

3.1.3.1. In the event Respondents identify an immediate or potential threat to human health and/or the environment, discover new releases of hazardous waste and/or hazardous waste constituents, or discover new SWMUs or AOCs not previously identified, Respondents shall notify the DTSC Project Coordinator orally within 48 hours of discovery and notify DTSC in writing within 10 days of discovery summarizing the findings, including the immediacy and magnitude of the potential threat to human health and/or the environment. Within 30 days of receiving DTSC's written request, Respondents shall submit to DTSC an IM Workplan for approval. The IM Workplan shall include a schedule for submitting to DTSC an IM Operation and Maintenance Plan and IM Plans and Specifications. The IM Workplan, IM Operation and Maintenance Plan, and IM Plans and Specifications shall be developed in a manner consistent with the Scope of Work for IM Implementation appended as Attachment 4. DTSC determines that immediate action is required, the DTSC Project Coordinator may orally authorize the Respondents to act prior to DTSC's receipt of the IM Workplan.

- 3.1.3.2. If DTSC identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous waste constituents, or discovers new SWMUs or AOCs not previously identified, DTSC will notify Respondents in writing. Within 30 days of receiving DTSC's written notification, Respondents shall submit to DTSC for approval an IM Workplan that identifies IMs that will mitigate the threat. The IM Workplan shall include a schedule for submitting to DTSC an IM Operation and Maintenance Plan and IM Plans and Specifications. The IM Workplan, IM Operation and Maintenance Plan, and IM Plans and Specifications shall be developed in a manner consistent with the Scope of Work for IM Implementation appended as Attachment 4. If DTSC determines that immediate action is required, the DTSC Project Coordinator may orally authorize Respondents to act prior to receipt of the IM Workplan.
- 3.1.3.3. All IM Workplans shall ensure that the IMs are designed to mitigate current or potential threats to human health and/or the environment, and should, to the extent practicable, be consistent with the objectives of, and contribute to the performance of, any remedy which may be required at the Denova TSDF Location.
- 3.1.3.4. Concurrent with the submission of an IM Workplan, Respondents shall submit to DTSC a Health and

Safety Plan in accordance with the Scope of Work for a Health and Safety Plan, Attachment 2.

- 3.1.3.5. Concurrent with the submission of an IM Workplan, Respondents shall submit to DTSC a Community Profile for DTSC approval in accordance with Attachment 3. Based on the information provided in the Community Profile, if DTSC determines that there is a high level of community concern, DTSC may require Respondents to prepare a Public Participation Plan.
 - 3.1.4. Corrective Measures Study (CMS).
- 3.1.4.1. Respondents shall prepare a CMS if contaminant concentrations exceed current health-based action levels and/or if DTSC determines that the contaminant releases pose a potential threat to human health and/or the environment.
- 3.1.4.2. Within 45 days of DTSC's approval of the RFI Report (or of Respondents' receipt of a written request from DTSC), Respondents shall submit a CMS Workplan to DTSC. The CMS Workplan is subject to approval by DTSC and shall be developed in a manner consistent with the Scope of Work for a CMS contained in Attachment 5.
- 3.1.4.3. The CMS Workplan shall detail the methodology for developing and evaluating potential corrective measures to remedy any contamination. The CMS Workplan shall identify the potential corrective measures, including any innovative technologies, that may be used for the containment, treatment, remediation, and/or disposal of contamination.

- 3.1.4.4. Respondents shall prepare treatability studies for all potential corrective measures that involve treatment except where Respondents can demonstrate to DTSC's satisfaction that they are not needed. The CMS Workplan shall include, at a minimum, a summary of the proposed treatability study including a conceptual design, a schedule for submitting a treatability study workplan, or Respondents' justification for not proposing a treatability study.
- 3.1.4.5. Respondents shall submit a CMS Report to DTSC for approval in accordance with DTSC-approved CMS Workplan schedule. The CMS Report shall be developed in a manner consistent with the Scope of Work for a CMS contained in Attachment 5. DTSC will review the CMS Report and notify Respondents in writing of DTSC's approval or disapproval.

3.1.5. Remedy Selection.

- 3.1.5.1. DTSC will provide the public with an opportunity to review and comment on the final draft of the CMS Report, DTSC's proposed corrective measures, and DTSC's justification for selection of such corrective measures.
- 3.1.5.2. Following the public comment period, DTSC may select final corrective measures or require Respondents to revise the CMS Report and/or perform additional work as part of the CMS.
- 3.1.5.3. DTSC will notify Respondents of the final corrective measures selected by DTSC in the Final Decision and

Response to Comments. The notification will include DTSC's reasons for selecting the corrective measures.

- 3.1.6. <u>Corrective Measures Implementation (CMI).</u>
- 3.1.6.1. Within 60 days of Respondents' receipt of notification of DTSC's selection of the corrective measures, Respondents shall submit to DTSC a CMI Workplan. The CMI Workplan is subject to approval by DTSC and shall be developed in a manner consistent with the Scope of Work for CMI contained in Attachment 6.
- 3.1.6.2. Concurrent with the submission of a CMI Workplan, Respondents shall submit to DTSC a Health and Safety Plan in accordance with Attachment 2.
- 3.1.6.3. The CMI program shall be designed to facilitate the design, construction, operation, maintenance, and monitoring of corrective measures. In accordance with the schedule contained in the approved CMI Workplan, Respondents shall submit to DTSC the documents listed below. These documents shall be developed in a manner consistent with the Scope of Work for CMI contained in Attachment 6.
 - o Operation and Maintenance Plan
 - o Draft Plans and Specifications
 - o Final Plans and Specifications
 - o Construction Workplan
 - o Construction Completion Report
 - o Corrective Measures Completion Report

- 3.1.6.4. DTSC will review all required CMI documents and notify Respondents in writing of DTSC's approval or disapproval.
- 3.1.6.5. As directed by DTSC, within 90 days of DTSC's approval of all required CMI documents, Respondents shall establish a financial assurance mechanism for Corrective Measures Implementation. The financial assurance mechanisms may include any mechanism described in California Code of Regulations, title 22, sections 66264.143 or 66265.143 as applicable. The mechanism shall be established to allow DTSC access to the funds to undertake CMI tasks if Respondents are unable or unwilling to undertake the required actions.
- 3.1.7. Termination of Corrective Action. Following implementation of the Corrective Measures, or when DTSC otherwise determines that No Further Action is needed, DTSC will issue the decision to terminate the Corrective Action Process. This decision will be subject to the public notice requirements of a Class III Permit modification as described in California Code of Regulations, title 22, Section 66270.42.
- 3.1.8. Respondents shall perform the work required by this Order in a manner consistent with: the attached Scopes of Work; DTSC-approved RFI Workplan, RFI Report, Community Profile, Health and Safety Code and other applicable state and federal laws and their implementing regulations; and applicable DTSC or

U.S. EPA guidance documents. Applicable guidance documents include, but are not limited to, the "RCRA Facility Investigation (RFI) Guidance: (Interim Final, May 1989, EPA 530/SW-89-031), "RCRA Groundwater Monitoring Technical Enforcement Guidance Document: (OSWER Directive 9950.1, September 1986), "Test Methods For Evaluating Solid Waste: (SW-846), and "Construction Quality Assurance for Hazardous Waste Land Disposal Facilities" (EPA 530/SW-85-031, July 1986).

3.2 Closure.

- 3.2.1. Within 90 days of receiving DTSC's written notification, Respondents shall submit to DTSC, for DTSC's approval, a Closure Plan for all HWMUs identified in Section 2.3 of this Order that meets the requirements of California Code of Regulations, title 22, section 66265.112 and guidance documents provided by DTSC. DTSC will review the Closure Plan and notify Respondents in writing of DTSC's approval or disapproval.
- 3.2.2 DTSC will provide the public with an opportunity to review and comment on the final draft of the Closure Plan. Following the public comment period, DTSC may approve the Closure Plan or make modifications to the Closure Plan prior to approval. DTSC will notify Respondents of the final Closure Plan Approval decision.
- 3.2.3. Within 180 days of the DTSC's approval of the Closure Plan, Respondents shall complete closure activities according to the approved Closure Plan.

- 3.2.4. Within 60 days of completing closure,
 Respondents shall submit to DTSC, by registered mail, a
 certification that Closure has been completed in accordance with
 the specifications in the approved Closure Plan. The
 certification shall comply with California Code of Regulations,
 title 22, section 66265.115.
- 3.2.5. Within 180 days after notification by DTSC, Respondents shall complete closure of the OB/OD Unit according to the Closure Plan approved by DTSC on June 23, 2000. DTSC may modify this Closure Plan if the subsurface soil sampling for perchlorate required by section 3.1.1.2 of this Order reveals that the soil beneath the OB/OD Unit is contaminated with perchlorate.
- 3.2.6 Within 60 days of completing closure of the OB/OD Unit, Respondents shall submit to DTSC, by registered mail, a certification that the OB/OD Unit has been closed in accordance with the specifications in the approved Closure Plan. The certification shall comply with California Code of Regulations, title 22, section 66265.115.

OTHER REQUIREMENTS AND PROVISIONS

4.1. <u>Project Coordinator</u>. Within 14 days of the effective date of this Order, DTSC and Respondents shall each designate a Project Coordinator and shall notify each other in writing of the Project Coordinator selected. Each Project

Coordinator shall be responsible for overseeing the implementation of this Order and for designating a person to act in his/her absence. All communications between Respondents and DTSC, and all documents, report approvals, and other correspondence concerning the activities performed pursuant to this Order shall be directed through the Project Coordinators. Each party may change its Project Coordinator with at least seven days prior written notice.

4.2. DTSC Approval.

- 4.2.1. Respondents shall revise any workplan, report, specification, or schedule in accordance with DTSC's written comments. Respondents shall submit to DTSC any revised documents by the due date specified by DTSC. Revised submittals are subject to DTSC's approval or disapproval.
- 4.2.2. Upon receipt of DTSC's written approval,
 Respondents shall commence work and implement any approved
 workplan in accordance with the schedule and provisions contained
 therein.
- 4.2.3. Any DTSC approved workplan, report, specification, or schedule required by this Order shall be deemed incorporated into this Order.
- 4.2.4. Verbal advice, suggestions, or comments given by DTSC representatives will not constitute an official approval or decision.

4.3. Submittals.

- 4.3.1. Beginning with the first full month following the effective date of this Order, Respondents shall provide DTSC with monthly progress reports of corrective action activities conducted pursuant to this Order. Progress reports are due on the 15th day of the month. The progress reports shall conform to the Scope of Work for Progress Reports contained in Attachment 7. DTSC may adjust the frequency of progress reporting to be consistent with site-specific activities.
- 4.3.2. Any report or other document submitted by Respondents pursuant to this Order shall be signed and certified by the Project Coordinator, a responsible corporate officer, or a duly authorized representative.
- 4.3.3. The certification required above, shall be in the following form:

I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those portions of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared at my direction in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted.

Signature:	
Name:	
Title:	
Date:	

4.3.4. Respondents shall provide three copies of all documents, including but not limited to, workplans, reports, and correspondence of 15 pages or longer. Submittals specifically

exempted from this copy requirement are all progress reports and correspondence of less than 15 pages, of which one copy is required.

4.3.5. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices, or other submissions relating to this Order shall be in writing and shall be sent to the current Project Coordinators.

4.4. Proposed Contractor/Consultant.

All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer or registered geologist, registered in California, with expertise in hazardous waste site cleanup. Respondents' contractor or consultant shall have the technical expertise sufficient to fulfill his or her responsibilities. Within 14 days of the effective date of this Order, Respondents shall notify the DTSC Project Coordinator in writing of the name, title, and qualifications of the professional engineer or registered geologist and of any contractors or consultants and their personnel to be used in carrying out the requirements of this Order. DTSC may disapprove of Respondents' contractor and/or consultant.

4.5. Quality Assurance.

4.5.1. All sampling and analyses performed by Respondents under this Order shall follow applicable DTSC and U.S. EPA guidance for sampling and analysis. Workplans shall

contain quality assurance/quality control and chain of custody procedures for all sampling, monitoring, and analytical activities. Any deviations from the approved workplans must be approved by DTSC prior to implementation, must be documented, including reasons for the deviations, and must be reported in the applicable report (e.g., RFI Report).

- 4.5.2. The names, addresses, and telephone numbers of the California State certified analytical laboratories

 Respondents propose to use must be specified in the applicable workplans.
- 4.5.3. All workplans required under this Order shall include data quality objectives for each data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended uses.
- 4.5.4. Respondents shall monitor to ensure that high quality data are obtained by its consultant or contract laboratories. Respondents shall ensure that laboratories used by Respondents for analysis perform such analysis according to the latest approved edition of "Test Methods for Evaluating Solid Waste, (SW-846)", or other methods deemed satisfactory to DTSC. If methods other than U.S. EPA methods are to be used, Respondents shall specify all such protocols in the applicable workplan (e.g., RFI Workplan). DTSC may reject any data that do not meet the requirements of the approved workplan, U.S. EPA

analytical methods, or quality assurance/quality control procedures, and may require resampling and analysis.

- 4.5.5. Respondents shall ensure that the California State certified laboratories used by Respondents for analyses have a quality assurance/quality control program. DTSC may conduct a performance and quality assurance/quality control audit of the laboratories chosen by Respondents before, during, or after sample analyses. Upon request by DTSC, Respondents shall have its selected laboratory perform analyses of samples provided by DTSC to demonstrate laboratory performance. If the audit reveals deficiencies in a laboratory's performance or quality assurance/quality control procedures, resampling and analysis may be required.
 - 4.6. <u>Sampling and Data/Document Availability.</u>
- 4.6.1. Respondents shall submit to DTSC upon request the results of all sampling and/or tests or other data generated by its employees, agents, consultants, or contractors pursuant to this Order.
- 4.6.2. Notwithstanding any other provisions of this Order, DTSC retains all of its information gathering and inspection authority and rights, including enforcement actions related thereto, under Health and Safety Code, and any other state or federal statutes or regulations.
- 4.6.3. Respondents shall notify DTSC in writing at least 10 days prior to beginning each separate phase of field

work approved under any workplan required by this Order. If
Respondents believe they must commence emergency field activities
without delay, Respondents may seek emergency telephone
authorization from DTSC Project Coordinator or, if the Project
Coordinator is unavailable, his/her Branch Chief, to commence
such activities immediately.

4.6.4. At the request of DTSC, Respondents shall provide or allow DTSC or its authorized representative to take split or duplicate samples of all samples collected by Respondents pursuant to this Order. Similarly, at the request of Respondents, DTSC shall allow Respondents or their authorized representative to take split or duplicate samples of all samples collected by DTSC under this Order.

4.7. Access.

- 4.7.1. Respondents shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of this Order and shall permit such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to this Order and that are within the possession or under the control of Respondents or its contractors or consultants.
- 4.7.2. To the extent that work being performed pursuant to this Order must be done beyond the property boundary,

Respondents shall use their best efforts to obtain access agreements necessary to complete work required by this Order from the present owners of such property within 30 days of approval of any workplan for which access is required. Best efforts as used in this paragraph shall include, at a minimum, a letter by certified mail from the Respondents to the present owners of such property requesting an agreement to permit Respondents and DTSC and its authorized representatives access to such property and offering the payment by Respondents of reasonable sums of money in consideration of granting access. Any such access agreement shall provide for access to DTSC and its representatives. Respondents shall provide DTSC's Project Coordinator with a copy of any access agreements. In the event that an agreement for access is not obtained within 30 days of approval of any workplan for which access is required, or of the date that the need for access becomes known to Respondents, Respondents shall notify DTSC in writing within 14 days thereafter regarding both the efforts undertaken to obtain access and its failure to obtain such agreements. DTSC may, at its discretion, assist Respondents in obtaining access.

- 4.7.3. Nothing in this section limits or otherwise affects DTSC's right of access and entry pursuant to any applicable state or federal law or regulation.
- 4.7.4. Nothing in this Order shall be construed to limit or otherwise affect Respondents' liability and obligation

to perform corrective action or closure beyond the Facility boundary.

4.8. Record Preservation.

4.8.1. Respondents shall retain, during the implementation of this Order and for a minimum of six years thereafter, all data, records, and documents that relate in any way to the implementation of this Order or to hazardous waste management and/or disposal at the Facility. Respondents shall notify DTSC in writing 90 days prior to the destruction of any such records, and shall provide DTSC with the opportunity to take possession of any such records. Such written notification shall reference the effective date, caption, and docket number of this Order and shall be addressed to:

Karen Baker, CEG, CHG, Chief Geology and Corrective Action Branch Department of Toxic Substances Control 5796 Corporate Avenue Cypress, California 90630

- 4.8.2. If Respondents retain or employ any agent, consultant, or contractor for the purpose of complying with the requirements of this Order, Respondents will require any such agents, consultants, or contractors to provide Respondents a copy of all documents produced pursuant to this Order.
- 4.8.3. All documents pertaining to this Order shall be stored in a repository approved by DTSC to afford ease of access by DTSC and its representatives.

- 4.9. Change in Ownership. No change in ownership or corporate or partnership status relating to the Facility shall in any way alter Respondents' responsibility under this Order. No conveyance of title, easement, or other interest in the Facility, or a portion of the Facility, shall affect Respondents' obligations under this Order. Unless DTSC agrees that such obligations may be transferred to a third party, Respondents shall be responsible for and liable for any failure to carry out all activities required of Respondents by the terms and conditions of this Order, regardless of Respondents' use of employees, agents, contractors, or consultants to perform any such tasks.
- 4.10. Notice to Contractors and Successors.

 Respondents shall provide a copy of this Order to all contractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order and shall condition all such contracts on compliance with the terms of this Order. Respondents shall give written notice of this Order to any successor in interest prior to transfer of ownership or operation of the Facility and shall notify DTSC at least seven days prior to such transfer.
- 4.11. <u>Compliance with Applicable Laws</u>. All actions required to be taken pursuant to this Order shall be undertaken in accordance with the applicable requirements of all local, state, and federal laws and regulations. Respondents shall

obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

4.12. <u>Costs.</u>

- 4.12.1 Respondents are liable for all costs associated with the implementation of this Order, including all costs incurred by DTSC in overseeing the work required by this Order.
- 4.12.2. DTSC will provide an estimate of DTSC's costs for corrective action. It is understood by the parties that the estimate may differ from the actual costs incurred by the DTSC in overseeing corrective action. DTSC will provide additional cost estimates to Respondents as the work progresses under this Order.
- 4.12.3. DTSC will provide Respondents with a billing statement at least quarterly, which will include the name(s) of the employee(s), identification of the activities, the amount of time spent on each activity, and the hourly rate charged. If Respondents do not pay an invoice within 60 days of the date of the billing statement, the amount is subject to interest as provided by Health and Safety Code 25360.1.
- 4.12.4. DTSC will retain all costs records associated with the work performed under this Order as required by state law. DTSC will make all documents that support the DTSC's cost determination available for inspection upon request, as provided by the Public Records Act.

4.12.5 All payments shall be made within 30 days of the date of the billing statement by check payable to the Department of Toxic Substances Control and shall be sent to:

Accounting Unit
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

All checks shall reference the name of the Facility, the Respondent's name and address, and the docket number of this Order. Copies of all checks and letters transmitting such checks shall be sent simultaneously to DTSC's Project Coordinator.

- 4.13. Endangerment during Implementation. In the event that DTSC determines that any circumstances or activity (whether or not pursued in compliance with this Order) are creating an imminent or substantial endangerment to the health or welfare of people at the Facility or in the surrounding area or to the environment, DTSC may order Respondents to stop further implementation of this Order for such period of time as needed to abate the endangerment. Any deadline in this Order directly affected by an Order to Stop Work under this section shall be extended for the term of the Order to Stop Work.
- 4.14. <u>Liability.</u> Nothing in this Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondents.

 Notwithstanding compliance with the terms of this Order,

Respondents may be required to take further actions as are necessary to protect public health or welfare or the environment.

- 4.15. Government Liabilities. The State of California shall not be liable for injuries or damages to persons or property resulting from acts or omissions by Respondents or related parties specified in section 4.19 in carrying out activities pursuant to this Order, nor shall the State of California be held as a party to any contract entered into by Respondents or their agents in carrying out activities pursuant to the Order.
- 4.16. Additional Enforcement Actions. By issuance of this Order, DTSC does not waive the right to take further enforcement actions.
- 4.17. <u>Incorporation of Plans and Reports.</u> All plans, schedules, and reports that require DTSC approval and are submitted by Respondents pursuant to this Order are incorporated in this Order upon approval by DTSC.
- 4.18. Penalties for Noncompliance. Failure to comply with the terms of this Order may subject Respondents to costs, penalties, and/or punitive damages for any costs incurred by DTSC or other government agencies as a result of such failure, as provided by Health and Safety Code section 25188 and other applicable provisions of law.
- 4.19. <u>Parties Bound</u>. This Order shall apply to and be binding upon Respondents, and their officers, directors, agents,

employees, contractors, consultants, receivers, trustees, successors, and assignees, including but not limited to individuals, partners, and subsidiary and parent corporations.

4.20. Compliance with Waste Discharge Requirements.

Respondents shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or a California Regional Water Quality Control Board.

4.21. <u>Submittal Summary.</u> Below is a summary of the major reporting requirements contained in this Order. The summary is provided as a general guide and does not contain all requirements. Please refer to the specific language of this Order for all the requirements.

Section	<u>Action</u>	<u>Due Date</u>	
3.1.1	Submit OB/OD Unit Perchlorate Investigation Workplan	45 days from effective date Of Order	
3.1.2.1 3.1.2.3 3.1.2.4 3.1.2.5 3.1.2.7	Submit RFI Workplan, Current Conditions Report (including assessment of need for Interim Measures), Community Profile, and Health and Safety Plan	90 days from date of submittal of OB/OD Unit Perchlorate Investigation Report or 90 days From effective date Of Order	
3.1.2.2 3.1.2.4	Implement approved RFI Workplan, submit RFI Report, submit RFI Summary Fact Sheet	In accordance with schedules contained in approved RFI Workplan	
3.2.5	Implement closure of OB/OD unit	Within 180 days of notification by DTSC	
3.2.1	Submit Closure Plan for HWMUs	90 days after Notification by DTSC	

4.1	Respondents and DTSC designate Project Coordinator and notify each other in writing	14 days from effective date of Order		
3.1.2.3	Notify DTSC orally of potential threats to human health or of additional SWMUs	48 hours after discovery		
3.1.2.3	Notify DTSC in writing of potential threats to human health or of additional SWMUs	10 days after discovery		
4.3.1	Submit first Progress Report	15th day of the month following the effective date of Order		
4.3.1	Submit Progress Reports	Monthly		
4.4	Notify DTSC in writing of contractors to carry out terms of Order	14 days from effective date of Order		
4.6.3	Notify DTSC of when field work starts	10 days before each phase of field work		

RIGHT TO A HEARING

- 5. You may request a hearing to challenge the Order.

 Request for a hearing must be made within 20 days of the effective date of this Order. Appeal procedures are described in the attached Statement to Respondent.
- 5.1 Under Health and Safety Code, section 25187(f), a request for a hearing shall not stay the effect of this Order.

EFFECTIVE DATE

6. As stated in Section 2.8 of this Order, DTSC finds that the significant possibility that the soil at the Denova TSDF Location may be contaminated with perchlorate and may pose an imminent and substantial endangerment to the public health or the environment. Pursuant to Health and Safety Code section 25187(f), this Order as a whole is effective immediately on the date of issuance indicated below.

Date	of	Issuance

//Signed by//

On May 6, 2003

Karen Baker, CEG, CHG, Chief Geology and Corrective Action Branch



